In the claims:

1. (Currently Amended) Apparatus for direct trunking between a time division multiplexed (TDM) switch and a ~~an asynchronous transfer mode (ATM)~~ backbone network, comprising:

an interface adapted ~~for connection to an ATM link for transferring ATM cells~~ to transfer data to, and ~~receiving ATM cells~~ receive data from, the ~~ATM~~ backbone network, and adapted for connection to at least one serial link for transferring pulse code modulated (PCM) data to, and receiving PCM data from, a fabric of the TDM switch, the interface converting the PCM data to ~~ATM cells~~ a data format of the backbone network and vice versa; and

the interface being further adapted to emulate a trunk peripheral of the TDM switch so that a computing module of the TDM switch is enabled to communicate with the interface using a protocol native to the computing module for communications with a trunk peripheral,

wherein in response to receiving a control message from the computing module to route a call to a desired trunk member, the interface is further adapted to map the desired trunk member to a connection set up through the backbone network.

2. (Original) The apparatus as claimed in claim 1 wherein the trunk peripheral emulated by the interface is a digital trunk controller.

3. (Currently Amended) The apparatus as claimed in claim 1 wherein the serial link ~~is connected to~~ comprises a switch fabric interface that receives PCM data from, and transfers PCM data to, ~~a switch~~ the fabric of the TDM switch.

4. (Currently Amended) The apparatus as claimed in claim 3 wherein the switch fabric interface ~~converts~~ is adapted to convert data received from the fabric of the TDM switch in electrical form to data in optical form for transfer over the serial link to the interface.

5. (Currently Amended) The apparatus as claimed in claim 1 wherein the interface is adapted to formulate and transfer messages through the ~~ATM~~ backbone network to peer interfaces connected to the ~~ATM~~ backbone network in order to set up connections for TDM calls.

6. (Currently Amended) The apparatus as claimed in claim 5 wherein the interface is further adapted to formulate and transfer ~~ATM~~ signaling messages in order to initiate the set up and release of ~~ATM virtual channel~~ connections in the ~~ATM~~ backbone network.

7. (Currently Amended) The apparatus as claimed in claim 5 wherein the TDM switch is ~~configured~~ adapted to view the interface as a trunk peripheral that supports a single large trunk group.

8. (Currently Amended) A method of providing direct trunking between a time division multiplexed (TDM) switch and a ~~an asynchronous transfer mode (ATM)~~ backbone network, comprising the steps of:

~~configuring~~ providing an interface adapted to convert pulse code modulated (PCM) data to ~~ATM cells~~ a data format of the backbone network, and vice versa, ~~so that~~ the interface ~~is~~ further adapted to communicate with a computing module of the switch using a messaging protocol native to the switch and ~~the interface thereby emulates~~ to emulate a trunk peripheral of the TDM switch; ~~and~~

connecting the interface directly to a serial link of a fabric interface of the TDM switch and directly to the backbone network to enable direct trunking between the TDM switch and the ~~ATM~~ backbone network; and

wherein in response to receiving a control message from the computing module to route a call to a desired trunk member the interface, the interface is further adapted to map the desired trunk member to a connection set up through the backbone network.

9. (Currently Amended) The method as claimed in claim 8 wherein the interface is further ~~configured~~ adapted to formulate and send messages through the ~~ATM~~ backbone network to peer interfaces in order to set up and release calls between the TDM switch and other TDM switches connected to the ~~ATM~~ backbone network.

10. (Currently Amended) The method as claimed n claim 9 wherein the interface is further ~~configured~~ adapted to formulate and send ~~ATM~~ signaling messages to initiate the setup or

release of ~~ATM virtual channel~~ connections for the transfer of bearer traffic associated with the calls.

11. (Currently Amended) The method as claimed in claim 8 ~~wherein~~ further comprising a step of arranging translation tables in the TDM switch ~~is configured to view~~ such that the TDM switch views the interface as a trunk peripheral that supports a single large trunk group.

12. (Currently Amended) The method as claimed in claim 8 ~~wherein~~ further comprising a step of arranging translation tables in the TDM switch ~~is configured to view~~ such that the TDM switch views a plurality of interfaces as a collection of trunk peripherals that support a single large trunk group.

13. (Currently Amended) Apparatus for direct trunking between a time division multiplexed (TDM) switch and a ~~an asynchronous transfer mode (ATM)~~ backbone network, comprising:

an interface adapted ~~for connection to an ATM link for transferring ATM cells~~ to transfer data to, and ~~receiving ATM cells~~ receive data from, the ~~ATM~~ backbone network, and adapted for connection to at least one serial link for transferring pulse code modulated (PCM) data to, and receiving PCM data from, a fabric of the TDM switch, the interface converting the PCM data to ~~ATM cells~~ a data format of the backbone network and vice versa;

the interface being further adapted to emulate a trunk peripheral of the TDM switch, ~~and~~ to communicate with peer interfaces connected to the ~~ATM~~ backbone network to control ~~virtual channel~~ connections for TDM calls,

wherein in response to a control message to route a call to a desired trunk member, the interface is further adapted to map the desired trunk member to a connection set up through the backbone network.

14. (Original) The apparatus as claimed in claim 13 wherein the interface is adapted to communicate with a computing module of the TDM switch using a protocol native to the computing module.

15. (Currently Amended) A method of providing direct trunking between a time division multiplexed (TDM) switch and a ~~an asynchronous transfer mode (ATM)~~ backbone network, comprising the steps of:

~~configuring~~ providing an interface adapted to convert pulse code modulated (PCM) data to ~~ATM cells~~ a data format of the backbone network, and vice versa, so that the interface is adapted to emulate a trunk peripheral of the TDM switch and to communicate with other interfaces connected to the ~~ATM~~ backbone network to control ~~virtual channel~~ connections for TDM calls; and

connecting the interface directly to a serial link of a switch fabric interface of the TDM switch to enable direct trunking between the TDM switch and the ~~ATM~~ backbone network,

wherein in response to receiving a control message from the computing module to route a call to a desired trunk member, the interface is further adapted to map the desired trunk member to a connection set up through the backbone network.

16. (Currently Amended) The method as claimed in claim 15 wherein the interface is controls the ~~virtual channel~~ connections for TDM calls by sending messages through the ~~ATM~~ backbone network to other interfaces in order to set up and release calls between the TDM switch and other TDM switches connected by other interfaces to the ~~ATM~~ backbone network.

17. (Currently Amended) The method as claimed in claim 16 wherein the interface is further configured to formulate and send ~~ATM~~ signaling messages ~~to an ATM switch to which the interface is connected~~ to initiate the set up or release of ~~ATM virtual channel~~ connections for the transfer of bearer traffic associated with the TDM calls.

18. (Original) The method as claimed in claim 15 wherein the TDM switch is configured to view the interface as a digital trunk controller that supports a single large trunk group.